



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D5770-043

Job Sheet 207407

POSITIVE
RECALL

Part No: D5770-043

Job Qty: 2 pcs

Part Name: Handle Hoop



Part Weight: 0 lbs

Job Created: 2/25/20

Due Date: 3/6/20

Type: Stock

Status: New

Job Tracking No:

Created By: Jennifer Renwick

Description:

POSITIVE RECALL

EFFECTIVE _____ AUTH _____

RELEASED _____ DATE _____

Priority: Medium

Placed by mistake
20.02.20

Note: URF 20-522 DWG 5770 REV.A IPP REV:A NEW ISSUE 20.01.14 JV VERF:DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup	Run	Workcenter / Supplier	Lead Time	
					Hrs	Hrs			
100	Large Fab - Welded Assy-1	2 pcs	3/6/20	0.00	1.00		Large Fab - 1		
							Large Fab - 10		
							Large Fab - 2		
							Large Fab - 3		
							Large Fab - 4		
							Large Fab - 5	DAS	
							Large Fab - 6	24	
							Large Fab - 7	9-89	
							Large Fab - 8		
							Large Fab - 9		
							Large Fab - 11 (Various)		
							Large Fab - 12		
110	QC 10	2 pcs	3/6/20	0.00	0.00		QC 10 - 10		
							QC 10 - 18		
							QC 10 - 24		
							QC 10 - 43		
							QC 10 - 50		
							QC 10 - 58		
							QC 10 - 9		
							QC 10 - 68		
120	QC 5	2 pcs	3/6/20	0.00	0.00		QC 5 - 10		
							QC 5 - 12		
							QC 5 - 17		
							QC 5 - 18		
							QC 5 - 19		
							QC 5 - 22		
							QC 5 - 24		
							QC 5 - 3		
							QC 5 - 43		
							QC 5 - 49		
							QC 5 - 51		



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Container No: S259752



Part: D5770-043

Job No: 207407

Serial No/Batch: S259752

Revision: REV.A

Inspector:

Exp Date:

Instructions:

Date: 03/02/20

Plex 2/26/20 10:03 AM Dart.lajeunesse.marie

				QC 5 - 58	
				QC 5 - 68	
				QC 5 - 9	
				QC 5 - 50	
				QC 5 - 30	
				QC 5 - 40	
				QC 5 - 61	
				QC 5 - 81	
130	Packaging 3-1 - Stock - B4B	2 pcs	3/6/20	0.00 0.00	Packaging 3 - 1 - B4B
					Packaging 3 - 2 - B4B
					Packaging 3 - 3 - B4B
					Packaging 3 - 4 - B4B
					Packaging 3 - 5 - B4B
					Packaging 3 - 6 - B4B
					Packaging 3 - 7 - B4B
					Packaging 3 - 8 - B4B
					Packaging 3 - 9 - B4B
					Packaging 3 - 10 - B4B
					Packaging 3 - 11 - B4B
					Packaging 3 - 12 - B4B
					Packaging 3 - 13 - B4B
					Packaging 3 - 14 - B4B
					Packaging 3 - 15 - B4B
					Packaging 3 - 16 - B4B
					Packaging 3 - 17 - B4B
					Packaging 3 - 18 - B4B
					Packaging 3 - 19 - B4B
					Packaging 3 - 20 - B4B
					Packaging 3 - 21 - B4B
					Packaging 3 - 22 - B4B
					Packaging 3 - 23 - B4B
					Packaging 3 - 24 - B4B
					Packaging 3 - 25 - B4B
					Packaging 3 - 26 - B4B
					Packaging 3 - 27 - B4B
					Packaging 3 - 28 - B4B
					Packaging 3 - 29 - B4B
					Packaging 3 - 30 - B4B
					Packaging 3 - 31 - B4B
					Packaging 3 - 32 - B4B
					Packaging 3 - 33 - B4B
					Packaging 3 - 34 - B4B
					Packaging 3 - 35 - B4B
					Packaging 3 - 36 - B4B
					Packaging 3 - 37 - B4B
140	QC 21 - SA	2 pcs	3/6/20	0.00 0.00	QC 21 - SA - 21
					QC 21 - SA - 70
					QC 21 - SA - 53

DAS
MAR 02 2020 40
9-89

68-
t
SVU
DAS
2
9-8-
24
9-89

DAS
21
9-89

MAR 03 2020

Part Op 100 - 1- Drill holes with DT10651 as per dwg D5770-3 2- Deburr 3- Weld bushing as per dwg D5770-043 Weld per dwg
 Descriptions: A/R 4130 rod Batch: 1390704- Grind welds flush
 110 - (QC10- Inspect visual per QSI004- ground welds)
 120 - (QC5- Inspect part completeness to step on W/O)
 130 - Identify as per dwg & Stock Location: _____. See note 6.
 140 - (QC21- Final Inspection - Work Order Release)

#014755

Job BOM

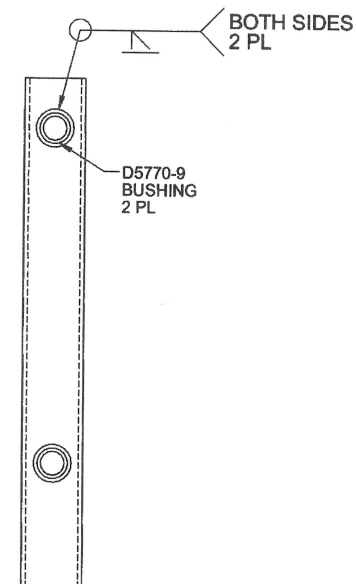
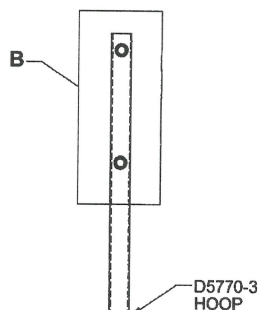
Part / Item	Component Name	Quantity	Operation
D5770-5	Hoop	2 pcs (1 ea)	100-Large Fab - Welded Assy-1
D5770-9	Bushing	4 pcs (2 ea)	100-Large Fab - Welded Assy-1

Container
5259556
5259373

Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
100-Large Fab - Welded Assy-1	D5770-5	2	0	0
	D5770-9	4	0	0
Part Specifications				
Specifications could not be found.				

Plex 2/26/20 10:03 AM Dart.lajeunesse.marie

QTY -043	P/N	DESCRIPTION
X	D5770-043	HANDLE HOOP
1	D5770-3	HOOP
2	D5770-9	BUSHING



D5770-043 HANDLE HOOP
(DERIVED FROM AERO DESIGN P/N 84262-01)

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 207407

DETAIL B
SCALE 3X

UNDER REVIEW
URF 2020-522 20.02.14 (NO)

- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: N/A
 - 6) IDENTIFICATION: IDENTIFY PER DART QSI 044
 - 7) WEIGHT: 0.86 lbs
 - 8) WELD PER DART QSI 004

RELEASED
2020 FEB 18 *NO*

APPROVED

DESIGN ZF
DRAWN ZF
CHECKED KPT
MFG. APPR. DD
APPROVED NO
DE APPR. CP
DATE 20.01.09

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA
DRAWING NO. **D5770**
TITLE **BASKET HOOPS**
REV. A
SHEET 2 OF 7
SCALE
NTS

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WRITTEN PERMISSION FROM DART AEROSPACE LTD.

Purchase Order Receipt Listing

Page 1 of 1

Tuesday, May 19, 2015 8:28:06 AM

All amounts are calculated in domestic currency.

All Vendors PO ID PO28412 Receipt Dates from 5/19/2015 to 5/19/2015 All Line Item Types
All Item ID/GL/WOs All Rec. Employees All Currencies
Grouped by Vendor ID

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M / Stock U/M	Required Date Required Qty	Recv Date/ Recv Emp	Recv Qty (PO U/M)	Cost Per Unit/ Recv Value	Inspected Qty/ Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
VendorID\Vendor Name		VU-FAC001	Factory Steel								
PO28412	1		M4130NTS0.500W.0 1 35		5/15/2015	5/19/2015	313.0000	\$5.98	0.0000	0	\$1,871.74
USD	No		4130 Square tube f .500 x .500 x .035w m132313		300.0000	DCUSER		\$1,871.74	0.0000	0	
	4		71400-15	Each	5/15/2015	5/19/2015	1.0000	\$45.00	0.0000	0	\$45.00
	No		cut & pack m132313		1.0000	DCUSER		\$45.00	0.0000	0	
	5		71401-45		5/15/2015	5/19/2015	1.0000	\$0.00	0.0000	0	\$0.00
	No		PROCUREMENT QUALITY CLAUSES m132313		1.0000	DCUSER		\$0.00	0.0000	0	
Total Received Quantity:											315.0000
Total Qty to Inspect (PO U/M):											0.0000
Total Reject Quantity:											0.0000
Total Receipt Value:											\$1,916.74
Total Balance Due Quantity:											0.0000

PACKING LIST

No. 46980

PG 1 OF 1



PL

FACTORY STEEL & METAL SUPPLY 14020 OAKLAND AVENUE DETROIT, MI 48203		PURCHASE ORDER # P028412		BUYER CHANTEL LAVOIE		SHIP DATE 05/11/2015	
(313)883-6300 PHONE (313)883-4883 FAX		JOB NAME		Tel (613) 632-3336 Fax (613) 632-4443		SHIP VIA YRC	
SOLD TO DART AEROSPACE 1270 ABERDEEN STREET HAWKESBURY, ON K6A 1K7		SALES ORDER # 40836		ORDER DATE 05/08/2015		SALES REP MICK HALON	
		SHIP TO DART AEROSPACE 1270 ABERDEEN STREET HAWKESBURY, ON K6A 1K7		SHIP INST YRC COLLECT		RESALE # 59-2958719	
				PRO#		CARRIER YRC	
				TERMS NET 30 DAYS		BLIND Y/N N	
						FOB DETROIT	

LINE	QUANTITY	DESCRIPTION	WIDTH	LENGTH	WEIGHT	UNIT PRICE	TOTAL
1	313 FT	4130N CD SMLSS SQ TUBE 1/2" X .035W Our Tag # Mill Ref # Heat # 107988 019824 571750 Pcs Total Ft 14 313		21' / 24' RL	69.266		
2	1 PC	PACKING CHARGES MTRS (CIRCLE) FAX SHIPMENT INVOICE ALL DATE: _____ INITIAL: _____					
TOTAL WT							TOTAL
69 LBS							
RECEIVED BY - SIGNATURE			RECEIVED BY - PRINTED NAME			DATE RECEIVED	



SO



PLYMOUTH TUBE CO. USA

1209 East 12th Street, Streator, Illinois 61354
Phone: (815) 873-1515 Fax: (815) 672-7343

TRUST YOUR SOURCE! ACCEPT NO SUBSTITUTIONS!



PRODUCT CERTIFICATION

SALES ORDER - LINE / RLS

108798 - 1 / 1

SOLD TO

PTC - Plymouth Engr. CD Shapes
201 Commerce Court
Hopkinsville, KY 42240
USA

WORK ORDER 019824
HEAT NUMBER 571756
MELT SOURCE Benteler Steel & Tube-Germany

ISO 9001, 14001
AND
TS 16949

CERTIFIED

CUSTOMER P.O. 2128	CUSTOMER PART SQ-N12035	QUANTITY 5,478.3 ft	LADING NO 00063335	CERT DATE 07/01/2013									
<p>PART DESCRIPTION SHSQ0500035J000</p> <p>***** Square OD *****</p> <p>Side1: 0.5000 Max:0.5100 Min:0.4900</p> <p>Side2: 0.5000 Max:0.5100 Min:0.4900</p> <p>Wall: 0.0350 Max:0.0380 Min:0.0320</p> <p>Length: 47.00/24.00</p> <p>Spec: MIL-T 6736B Seamless Aircraft</p> <p>Grade: 4130</p> <p>Anneal: Cond N</p>													
<p>CERTIFICATION REQUIREMENTS</p> <p>FAR BAA (FAR 52.225-1 Buy America Act Supplies), DFARS 252.225-7001 By America Act & Bal. of Payments Program FAR TAA (FAR 52.225-5 Trade Agreements)(Paragraph 1,3,4,5)This material was Eddy Current tested and conforms to the requirements of ASTM A-450.The Grain size is determined and reported by the raw material supplier in accordance to ASTM E-112. This raw material was magnetic particle inspected by the raw material supplier in accordance to AMS 2640J and/or ASTM E-1444, and rated as Frequency, and Severity to AMS 2301, latest revision. Yield is determined by using the 0.2% offset method.Material produced in accordance to ASTM A-519-12.</p>													
Chemical Analysis													
C	Mn	P	S	Si	Al	Cr	Mo	Ni	Pb	Cu	V	Ti	Sn
.320	.54	.008	.002	.240	.031	.87	.18	.08	.001	.09	.002	.002	.011
Physical Properties													
Freq.	Severity	Grain Size											
.020	.015	9											
Mechanical Properties													
TEST	UNITS	#TESTS	HIGH	LOW	AVERAGE	STD-DEV							
Tensile	Psi	6	135100	129920	132265	2171							
Yield	Psi	6	130770	125390	127698	2170							
Elongation	%	6	22	22	22	0							
Rockwell B	Rb	6	98	98	98	0							
Rockwell C	Rc												
TEST	RESULT												
Decarb/OD	Pass												
Total ID/OD decarb	Pass												

I certify that the results are a true and correct copy of the records prepared and maintained by Plymouth Tube Company, Streator in compliance with the requirements of the cited specification. Chemistry is as reported by the Steel supplier. This test report cannot be reproduced or distributed except in full without the written permission of Plymouth Tube.

Janie Dussell

Quality Assurance



PLYMOUTH TUBE CO. - USA

1209 East 12th Street, Streator, Illinois 61364

Phone: (815) 673-1515 Fax: (815) 672-7343

TRUST YOUR SOURCE! ACCEPT NO SUBSTITUTIONS!



PRODUCT CERTIFICATION

SALES ORDER - LINE / RLS

108798 - 1 / 1

SOLD TO

PTC - Plymouth Engr. CD Shapes
201 Commerce Court
Hopkinsville, KY 42240
USA

WORK ORDER 019824
HEAT NUMBER 571756
MELT SOURCE Benteler Steel & Tube-Germany

ISO 9001, 14001
AND
TS 16949

CERTIFIED

CUSTOMER P.O.	CUSTOMER PART	QUANTITY	LADING NO	CERT DATE
2128	SQ-N12035	5,478.3 ft	00063335	07/01/2013
PART DESCRIPTION		SHSQ0500035J000		
Additional Specification(s)				
AMS-T 6736B, 6360L & 6371J				
<p>This test report data is for the heat Chemistry Stated above.</p> <p>The material in this test report is:</p> <ol style="list-style-type: none"> 1) Drawn in the USA 2) Free from <u>Polybrominated Biphenyls (PBB)</u>, <u>Polybrominated Diphenyl Ethers (PBDE)</u>, and <u>Mercury</u> contamination. 3) <u>NAFTA</u> compliant. <p>End of Certification</p>				

I certify that the results are a true and correct copy of the records prepared and maintained by Plymouth Tube Company, Streator in compliance with the requirements of the cited specification. Chemistry is as reported by the Steel supplier. This test report cannot be reproduced or distributed except in full without the written permission of Plymouth Tube.

Jamie Durose-H
Quality Assurance



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO28412**

Purchase Order Date 5/8/2015 12:26:41 PM
PO Print Date 5/8/2015

Page Number 1 of 2

Order From :
FACTORY STEEL
14020 OAKLAND AVE.
DETROIT,, MI 48203
US

VU-FAC001

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

REVISED

Contact Name
Vendor Phone 313 883 6300

Ship To Contact
Ship To Phone
Ship Via: YRC ppd
Ship Acct:

Buyer
Customer POID
Customer Tax # 10127-2607
Terms Net 30
Currency USD
FOB Destination-Collect

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
----------	---	------------------------	--------------------------------------	----	--------------------------------	---------------	-------------------

1	M4130NTS0.500W.035	4130 Square tube .500 x .500 x .035w	5/15/2015 Yes 5/15/2015		300.00 f	313 f. \$5.98	\$1,794.00
MATERIAL: AISI N STEEL SQUARE TUBING AS PER MIL-T-6736 OR AMS 6371/6360/6361/6362/6373/6374							

Line Total: \$1,794.00

4	71400-15	cut & pack	5/15/2015 Yes 5/15/2015		1.00 Each	\$45.00	\$45.00
---	----------	------------	-------------------------------	--	--------------	---------	---------

Line Total: \$45.00

SP505-19

Note:

5/8/2015



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO28412**

Purchase Order Date 5/8/2015 12:26:41 PM

PO Print Date 5/8/2015

Page Number 2 of 2

Order From :

VU-FAC001

Ship To : DART AEROSPACE LTD

FACTORY STEEL
14020 OAKLAND AVE.
DETROIT,, MI 48203
US

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 313 883 6300

Buyer

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Terms

Net 30

Currency

USD

FOB

Destination-Collect

Ship To Contact

Ship To Phone

Ship Via: YRC ppd

Ship Acct:

5	71401-45	PROCUREMENT QUALITY CLAUSES	5/15/2015	1.00	\$0.00	\$0.00
---	----------	--------------------------------	-----------	------	--------	--------

No

Procurement Quality Clauses

5/15/2015

A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)
A026 certification of material conformance
A041 quality management system
A042 dart notification by supplier
A043 retention of quality document

Line Total: \$0.00

PO Total: \$1,839.00

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Change Nbr:

4

Change Date: 5/8/2015

P028412
Fm 132313



DESIGN DH	DRAWN BY DH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. M4130N-TS	REV. A SHEET 1 OF 1
DATE 05.02.09		TITLE 4130N SQUARE TUBING	SCALE NTS
A	05.02.09	NEW ISSUE	

PURCHASE MATERIAL: AISI4130N STEEL SQUARE TUBING PER ONE OF
THE FOLLOWING SPEC'S: MIL-T-6736, AMS 6371,
6360, 6361, 6362, 6373 OR 6374

PART NUMBER: M4130N-TS | A.AAA | W | .TTT |

WHERE A.AAA = WIDTH IN INCHES
TTT = WALL THICKNESS IN INCHES

EXAMPLE: 0.50" X 0.035" WALL = M4130N-TS0.500W.035

RELEASED
05 03 25 [Signature]

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Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/>	DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Cross tube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> </div> <div> Eng. (Non-AW) <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Water Jet <input type="checkbox"/> Supplier <input type="checkbox"/> Quality <input type="checkbox"/> </div> </div>			
Date :	Sequence #:	QTY Affected :	MRB (QSI042)		
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
				QC / QA Coordinator	
Root Cause Operator <input type="checkbox"/> Manufacturing Process <input type="checkbox"/> Equip/Tooling <input type="checkbox"/> Handling/Presservation <input type="checkbox"/> Material <input type="checkbox"/> Product Improvement <input type="checkbox"/> Process Improvement <input type="checkbox"/> Human Factors <input type="checkbox"/>	FAULT CATEGORY <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Bending <input type="checkbox"/> Crushing <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave/Twist <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Mislabeled </div> <div> <input type="checkbox"/> Contamination <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Incomplete/Unclear Instructions <input type="checkbox"/> Drill Holes <input type="checkbox"/> Fit/Function </div> <div> <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain Direction <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Off-set/Set-up </div> <div> <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Outside Tolerance <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Misread </div> </div>				
Other/Details:					